Remarks

Claims 34 and 37-39 are pending the application. Claim 39 has been amended. Support for the claim amendment can be found throughout the application, including the claims as originally filed. Importantly, no new matter has been added to the claims. The amendments to the claims should not be construed to be an acquiescence to any of the rejections. The amendments to the claims are being made solely to expedite the prosecution of the above-identified application. The Applicant reserves the right to further prosecute the same or similar claims in subsequent patent applications claiming the benefit of priority to the instant application. 35 USC § 120.

Response to Rejections under 35 U.S.C. § 112¶2

Claim 39 stands rejected under 35 U.S.C. § 112¶2 based on the Examiner's contention that it is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner contends that the term "methyl" in claim 39 broadens rather than narrows claim 34. Applicants respectfully traverse this rejection.

Claim 39, as amended, does not include the term "methyl" as a definition for "Z." Applicant submits that claim 39, as amended, is definite.

Accordingly, Applicants request the withdrawal of the rejection of claim 39 under 35 U.S.C. § 112¶2.

Response to Rejections under 35 U.S.C. § 102(b)

U.S. Patent No. 4,281,110 to Blount

Claims 34 and 38 stand rejected under 35 U.S.C. § 102(b) based on the Examiner's contention that they are anticipated by Blount (U.S. Patent No. 4,281,110). Applicants respectfully traverse this rejection.

Claims 34 and 38 are not anticipated by Blount because Blount discloses using *salts* of alkyl aryl sulfates to produce broken down lignin-cellulose silicate copolymers, and does not disclose coatings of *neutral* sulfates as presently claimed.

In order to anticipate a claim, a single source must contain all of the elements of the claim. *See Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569 (Fed. Cir. 1984).

Blount discloses a process for the production of broken down lignin-cellulose silicate copolymers. See column 1, lines 15-22. Blount discloses using alkyl aryl sulfates as an emulsifying or dispersing agent in the reaction mixture. See column 5, lines 1-5. The emulsifying or dispersing agents are any salt-stable compounds which are highly hydrophobous in nature and have a hydrophobic group as one component and a hydrophilic group as the other component. See column 4, lines 43-47. The types of emulsifying or dispersing agents described by Blount are anionic salts, with a polar $-OS(O)_2O^- Na^+$ group at one end and an aryl group with a carbon chain at the other end. The medium in which Blount's reactions are run in is a mixture of water and organic solvent. See Examples. Emulsifying agents are needed to get these polar and non-polar solvents to mix, but they are not part of the final product, which in this case is a polymer that settles out. See column 18, Example 1, lines 39-43 ("The reaction is complete in 30 minutes to 8 hours thereby producing a light brown broken down lignin-cellulose silicate copolymer which settles out. The water, salt and unreacted components are removed [by] filtration."). An Na^+ salt was used in the example above because in all of Blount's reactions NaOH is used as a base to break down the components of the polymeric mixture. See Examples.

The present claims do not claim coatings comprising salts of sulfates but rather coatings comprising neutral sulfates. This was done purposefully because salts of the sulfates of the present claims do not work in a coating. They leech out of the coating too quickly and are lost, allowing fouling agents to then form on the supposedly protected surface. Blount does not anticipate the present claims because Blount discloses salts as emulsifying agents that are used to mix water and a non-polar solvent, and are then removed from the final product. It also would not have been obvious to one of ordinary skill in the art to use a neutral compound when an emulsifying agent is taught, because the purpose of an emulsifying agent when used with water and an organic solvent teaches away from using a neutral compound (i.e. one would want the polar anionic salt end when water is involved). Even if a neutral emulsifying agent was added it would not remain neutral under the basic reaction conditions of Blount. Because Blount does not disclose coatings comprising neutral aryl sulfates, Applicants submit that Blount does not

disclose each and every element of the claims, and therefore does not anticipate claims 34 and 38.

Accordingly, Applicants respectfully request the withdrawal of the 35 U.S.C. § 102(b) rejection of claims 34 and 38 over Blount.

U.S. Patent No. 4,046,731 to Mortimer et al.

Claim 39 stands rejected under 35 U.S.C. § 102(b) based on the Examiner's contention that it is anticipated by Mortimer et al. (U.S. Patent No. 4,046,731). Applicants respectfully traverse this rejection.

Mortimer et al. does not anticipate claim 39 because Mortimer does not disclose the neutral aromatic sulfate compound containing coatings of the present invention.

In order to anticipate a claim, a single source must contain all of the elements of the claim. *See Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569 (Fed. Cir. 1984).

Mortimer et al. discloses a process for preparing dopes from which certain aromatic oxadizole/N-alkylhydrazide copolymers may be isolated. See column 1, lines 8-10. Methyl sulfate is used as a C_1 to C_4 alkyl salt in slurries as a methylating agent to control the proportion of methylated monomers and viscosity of the resulting copolymers. See column 3, lines 56-63.

Mortimer et al. does not anticipate or render obvious claim 39 because "Z" in general structure 1 of claim 39 is not an alkyl group. Additionally, the compounds in the coatings of the present claims are not salts.

Accordingly, the Applicants respectfully request the withdrawal of the 35 U.S.C. § 102(b) rejection of claim 39 over Mortimer et al.

U.S. Patent No. 5,066,706 to Destryker et al.

Claims 34 and 37 stand rejected under 35 U.S.C. § 102(b) based on the Examiner's contention that they are anticipated by Destryker et al. (U.S. Patent No. 5,066,706). Applicants respectfully traverse this rejection.

Destryker et al. does not anticipate claims 34 and 37 because Destryker et al. discloses using *salts* of alkyl aryl sulfates to prepare latexes based on polypyrrole, and does not disclose coatings of *neutral* aryl sulfates as presently claimed.

In order to anticipate a claim, a single source must contain all of the elements of the claim. *See Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569 (Fed. Cir. 1984).

Destryker et al. discloses a process for preparing a latex based on polypyrrole, from which it is possible to obtain adherent homogenous films in a wide range of thickness and having high conductivity. See column 1, lines 9-12. The process is based on polymers of pyrrole or a pyrrole derivative in an aqueous reaction medium comprising a ferric salt, a polyvinyl alcohol or a derivative of this alcohol, and a codispersant agent. See column 1, linès 36-40. Codispersant agent is understood to mean organic compounds capable of giving rise to anions. Among theses compounds, organic compounds which react with the ferric salt present in the reaction medium, or which have already reacted with a ferric salt before introduction into the reaction medium, are preferred. See column 1, lines 44-49. One of the suggested codispersant agents is aryl sulfate. See column 1, line 50. Destryker et al., as in Blount, discloses using salt forms of aryl sulfates as codispersants to get non-polar pyrroles to mix in an aqueous medium. See column 2, lines 62-68, and continued into column 3, lines 1-3. In this case the salt is an iron salt according to the following reaction. Ferric chloride is used in this example because it is the preferred iron compound. See column 2, lines 26-27.

$$Fe(III)Cl_3 + 3\ HOS(O)_2O\text{-aryl}) \text{ ------> } Fe(III)(OS(O)_2\text{-aryl})_3 + 3\ HCl$$

This is even assuming that a neutral aryl sulfate is used. As disclosed in Dekstryker et al., the preferred codispersant is sodium dodecyl sulfate. See column 2, lines 2-3. As with all codispersant agents, once they have done their job of getting two things of different polarity to mix, they are nothing more than an impurity to be washed out. See column 5, Examples 7 and 8, lines 1-12.

As discussed previously, the present invention relates to a coating comprising neutral compounds, not salts. Destryker et al. does not anticipate the present claims because Destryker et al. discloses salts as codispersant agents that are used to mix water and pyrroles, and are removed from the final product. It also would not have been obvious to one of ordinary skill in the art to

use a neutral compound when a codispersant agent is taught, because the purpose of a codispersant agent when used with water and an organic compound teaches away from using a neutral compound (i.e. one would want the polar anionic salt end when the medium is water). Even if a neutral codispersant agent was added it would not remain neutral in the presence of the ferric salts disclosed in Destryker et al.

Because Destryker et al. does not disclose coatings comprising neutral aryl sulfates, Applicants submit that Destryker et al. does not disclose each and every limitation of claims 34 and 37. Accordingly, Applicants request the withdrawal of the rejection of claims 34 and 37 under 35 U.S.C. § 102(b).

Fees

The Applicants believe no fee is due in connection with the filing of this paper. Nevertheless, the Director is hereby authorized to charge any required fee to our Deposit Account, **06-1448**.

Conclusion

In view of the above amendments and remarks, the Applicants believe that the pending claims are in condition for allowance. If a telephone conversation with Applicant's Agent would expedite prosecution of the application, the Examiner is urged to contact the undersigned.

Respectfully submitted,
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Date: 3/7/06